## **SIEMENS**

Data sheet 3RT1023-1BB44



Power contactor, AC-3 9 A, 4 kW / 400 V 24 V DC 3-pole, 2 NO + 2 NC, Size S0 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2023-1BB44<<

Figure similar

product brand name	SIRIUS
product designation	power contactor
General technical data	
size of contactor	S0
degree of pollution	3
protection class IP	
<ul><li>on the front</li></ul>	IP20
of the terminal	IP00
mechanical service life (switching cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.07.2006 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A
● at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	40 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	35 A
• at AC-3	
— at 400 V rated value	9 A
• at AC-4 at 400 V rated value	8.5 A
operational current	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— at 24 V rated value	35 A

1.440.14 1 1	
— at 110 V rated value	4.5 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
operational current	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 110 V rated value	2.5 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	15 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
operating power	
• at AC-1	
— at 400 V rated value	23 kW
at AC-2 at 400 V rated value	4 kW
• at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW
— at 690 V rated value	5.5 kW
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
• rated value	24 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
initial value	0.8
full-scale value	1.1
closing power of magnet coil at DC	5.4 W
holding power of magnet coil at DC	5.4 W
Auxiliams aimesis	
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NC contacts for auxiliary contacts	2
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	2
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	2 10 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value	2 10 A 6 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value	2 10 A 6 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12	2 10 A 6 A 3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12 • at 60 V rated value	2 10 A 6 A 3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12 • at 60 V rated value • at 110 V rated value • at 220 V rated value	2 10 A 6 A 3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12 • at 60 V rated value • at 110 V rated value	2 10 A 6 A 3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12  • at 60 V rated value • at 110 V rated value • at 220 V rated value operational current at DC-13	2 10 A 6 A 3 A 6 A 3 A 1 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12 • at 60 V rated value • at 110 V rated value • at 220 V rated value operational current at DC-13 • at 24 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value operational current at DC-12  • at 60 V rated value • at 110 V rated value operational current at DC-13 • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A 0.3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value  operational current at DC-12  • at 60 V rated value • at 110 V rated value  • at 220 V rated value  operational current at DC-13  • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value  operational current at DC-12  • at 60 V rated value • at 110 V rated value • at 220 V rated value  operational current at DC-13  • at 24 V rated value • at 60 V rated value • at 20 V rated value  operational current at DC-13  • at 24 V rated value • at 20 V rated value • at 20 V rated value • at 110 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A 0.3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value  operational current at DC-12  • at 60 V rated value • at 110 V rated value • at 220 V rated value  operational current at DC-13  • at 24 V rated value • at 60 V rated value • at 10 V rated value  operational current at DC-13  • at 24 V rated value • at 220 V rated value  oat 110 V rated value • at 110 V rated value • at 210 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 230 V rated value • at 240 V rated value • at 250 V rated value • at 250 V rated value  contact reliability of auxiliary contacts  Short-circuit protection design of the fuse link	2 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A 0.3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value  operational current at DC-12  • at 60 V rated value • at 110 V rated value • at 220 V rated value  operational current at DC-13  • at 24 V rated value • at 60 V rated value • at 220 V rated value  oat 60 V rated value  oat 710 V rated value  oat 60 V rated value  oat 710 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A 0.3 A 1 faulty switching per 100 million (17 V, 1 mA)
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value  operational current at DC-12  • at 60 V rated value • at 110 V rated value • at 220 V rated value  operational current at DC-13  • at 24 V rated value • at 60 V rated value • at 10 V rated value  operational current at DC-13  • at 24 V rated value • at 220 V rated value  oat 110 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value	2 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A 0.3 A

<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A	
Installation/ mounting/ dimensions		
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022	
<ul> <li>side-by-side mounting</li> </ul>	Yes	
height	85 mm	
width	45 mm	
depth	150 mm	
required spacing for grounded parts at the side	6 mm	
Connections/ Terminals		
type of electrical connection		
<ul> <li>for main current circuit</li> </ul>	screw-type terminals	
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals	
type of connectable conductor cross-sections		
for main contacts		
— solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²	
<ul> <li>solid or stranded</li> </ul>	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²)	
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (16 12), 2x (14 10), 1x 8	
type of connectable conductor cross-sections		
<ul> <li>for auxiliary contacts</li> </ul>		
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12	

Certificates/ approvals

**General Product Approval** 

**EMC** 

**Test Certificates** 











Special Test Certificate

**Test Certificates** 

Marine / Shipping

other

Type Test Certificates/Test Report









**Miscellaneous** 

other Railway

<u>Confirmation</u> <u>Miscellaneous</u> <u>Special Test Certificate</u>

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1023-1BB44

Cax online generator

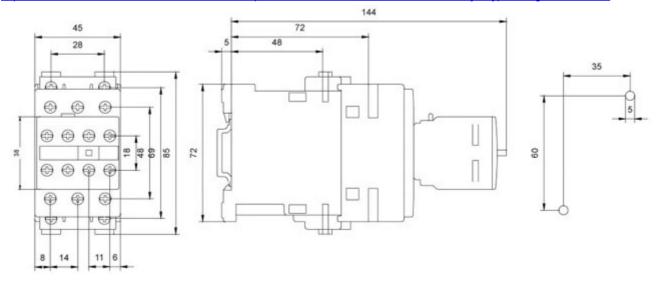
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1023-1BB44

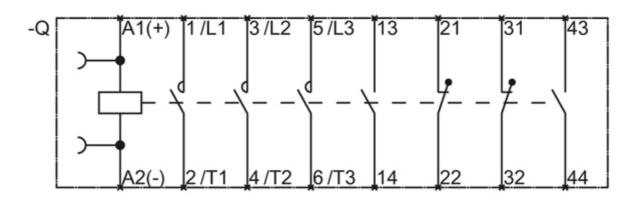
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RT1023-1BB44}$ 

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RT1023-1BB44&lang=en

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1023-1BB44&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1023-1BB44&objecttype=14&gridview=view1</a>





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